GENERAL NOTE:-

ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH

OTHER DRAWINGS FOR PROPER CO-ORDINATION.
CONTRACTOR SHOULD SUBMIT DETAILED SHOP DRAWING TO CONSULTANT FOR APPROVAL BEFORE COMMENCING WORK.

1. THE RAIN WATER PIPES SHALL TERMINATED 150mm. ABOVE CROUND LEVEL AND DISCHARGE INTO SOFT LANDSCAPE AREA WITH PROPER COVERING.
2. EXTRA CARE MUST BE TAKEN FOR DRAIN LINE AND CONNECTIONS. NO CONNECTIONS SHALL BE COVERED WITHOUT ENGINEER'S INSPECTION AND APPROVAL.
3. SCREED TO COVER DRAIN PIPE SHALL BE CARRIED OUT UNDER CLOSED INSPECTION. NO CRACKS OR VOID SOUND SHALL BE ACCEPTED FOR DRAIN PIPE

STANDARD DRAINAGE NOTES:-

1. FOUL SEWERAGE AND SURFACE WATER DRAINAGE INSTALLATIONS SHALL COMPLY WITH RELEVANT TO O.N.B.S., B.S.8301 AND CURRENT BYE-LAWS AND REGULATIONS PUBLISHED BY ORANAGE DIVISION, CIVIL ENGINEERING DEPARTMENT, AT THE MINISTRY OF MUNICIPAL AFFAIRS AND AGRICULTURE, OF THE STATE OF QATAR.

2. ALL THE INTERNAL SANITARY PIPE WORK SHALL BE UPVC PIPE CONFORMING ACCORING TO THE REQUIREMENTS TO B.S. 5572.

3. ANY GRAINAGE RUN UNDER THE BUILDING OR AT A DEPTH OF 600 mm OR LESS IN PEDESTRIAN AREAS OR AT A DEPTH OF 1200mm OR LESS IN VEHICULAR AREAS SHALL BE SURROUNDED WITH 150 mm. THICK CONCRETE IN S.R.C. 20.

4. ALL PIPE WORK FLEXIBLE JOINTS SHALL BE RETAINED BY USING FIBRE BOARDS AT EACH JOINT.

5. ALL VENT PIPES SHALL BE TERMINATED ABOVE ROOF LEVEL.

6. MANHOLES THAT ARE MORE THAN 1 METRE DEEP ARE TO BE CONSTRUCTED IN MASS CONCRETE (S.R.C.)

7. ALL MANHOLE COVERS ARE TO BE OF DOUBLE SEAL AND RECESSED TYPE IF THEY ARE PROVIDED INSIDE THE BUILDING.

8. NO SURFACE WATER RUN OFF WILL BE DRAINED OUTSIDE OF THE DEVELOPMENT SITE BOUNDARY.

9. NO SWIMMING POOL WATER WILL BE ALLOWED TO BE DISCHARGED INTO THE DRAINAGE SYSTEM, IT SHOULD BE DRAINED TO A SEPARATE SOAK AWAY. SHOW DETAILS FOR OWN PUMPING ARRANGEMENTS IN CASE OF LARGE SWIMMING POOLS.

10. CLIENT WILL BE RESPONSIBLE FOR PUMPING ARRANCEMENT IN FUTURE, IF GOVERNMENT SEWER LINE LAID ARE NOT DEEP ENOUGH FOR CONNECTION.

11. ALL WORK MATERIALS SHALL BE STRICTLY IN ACCORDANCE WITH O.N.B.S., UNLESS OTHERWISE INDICATED ON THE DRAWINGS AND WRITTEN SPECIFICATIONS.

12. ALL LEVELS SHOULD BE IN ACCORDANCE WITH O.N.D. LEVELS.

13. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO ASSEMBLY OR CONSTRUCTION OF ANY WORK.

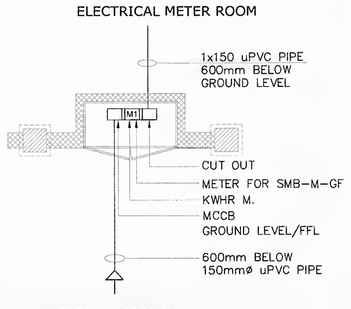
14. ALL MANHOLES SHALL BE CONSTRUCTED AS PER THE DETAILS SHOWN ON THE STANDARD DRAWINGS – FIC. 1 & 2 APPROVED BY C.E.O. DRAINAGE DIVISION .

15. ALL MANHOLES SHOULD PREFERABLY BE SITED ON PAVED AREAS FOR EASE OF LOCATION AND MAINTENANCE PURPOSES.

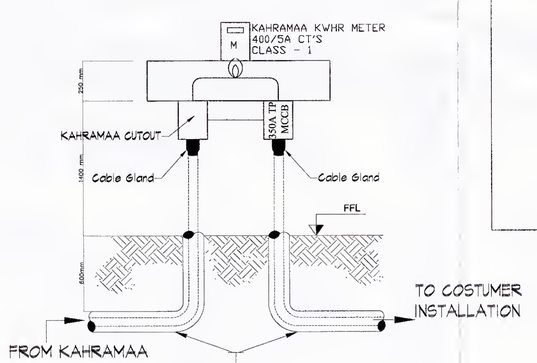
MANHOLE SCHEDULE

MH/NO	COV/LEV (m)	INV./LEV (m)	SIZE (mm)	COVER SIZE (mm)
MH–1	+0.00	–1.22	900ø mm	600X600mm
MH–2	+0.00	–1.02	600X600mm	600X600mm
MH–3	+0.00	–0.82	600X600mm	600X600mm
MH–4	+0.00	–0.64	600X600mm	600X600mm
MH–5	+0.00	–0.51	600X600mm	600X600mm
MH–6	+0.00	–0.35	600X600mm	600X600mm
MH–7	+0.00	–0.92	600X600mm	600X600mm
MH–8	+0.00	–0.77	600X600mm	600X600mm
MH–9	+0.00	–0.62	600X600mm	600X600mm
MH–10	+0.00	–0.53	600X600mm	600X600mm
MH–11	+0.00	–0.4	600X600mm	600X600mm

ELECTRICAL METER ROOM



FROM KAHRAMAA ELECTRICAL SUPPLY

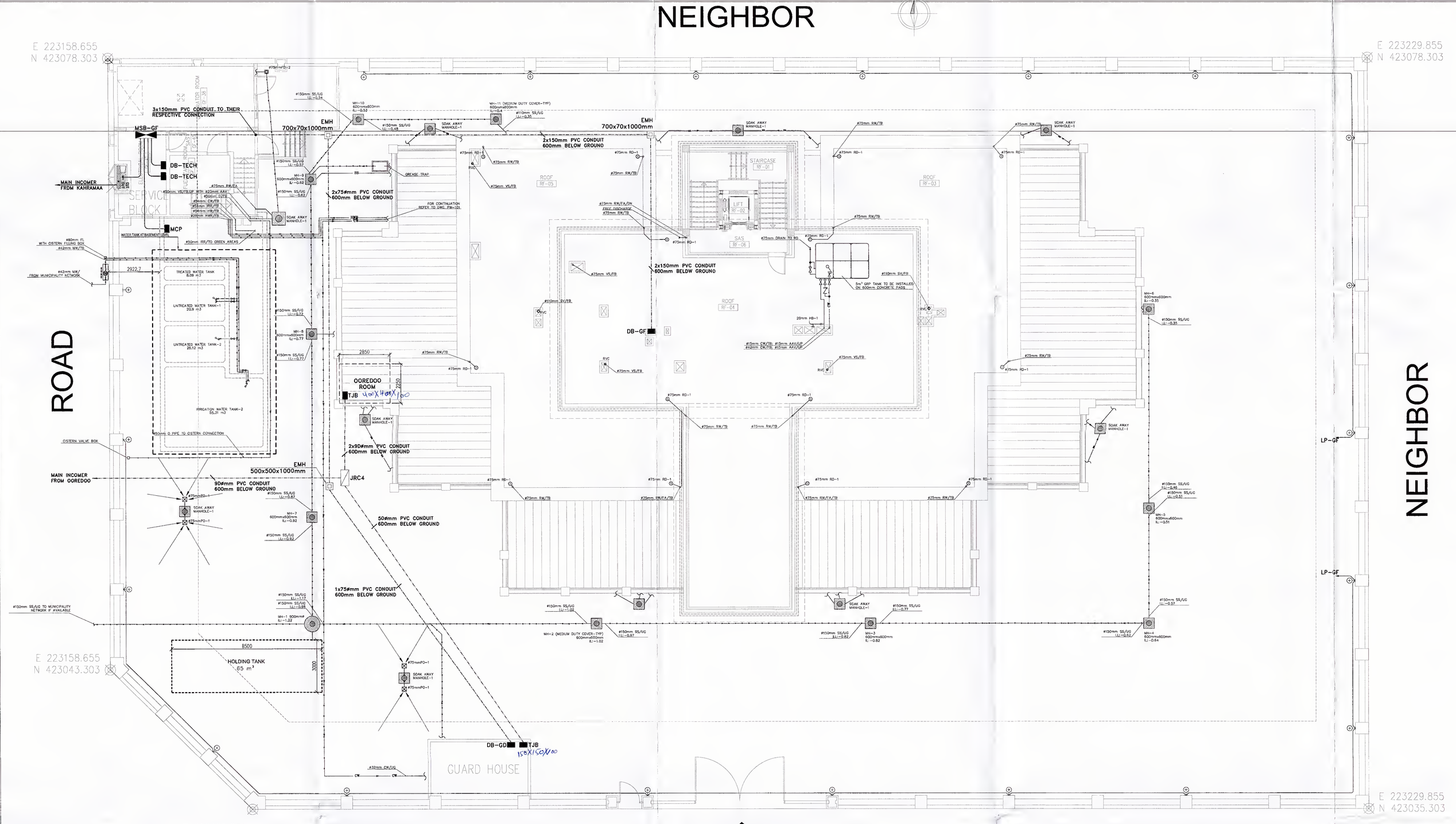


TYPICAL DETAIL FOR MSB GF-1 & MSB GF-2

LOAD SUMMARY OF MSB-GF

MSB-GF/1	WATER HEATER	COOKER	GENERAL LOAD	OTHERS	AC	TOTAL
CONNECTED LOAD	9.2kW	38.9kW	67.53kW	19.66kW	128.4kW	263.7kW
DEMAND FACTOR	0.3	0.4	0.66	0.85	1	---
DEMAND LOAD	2.76kW	15.56kW	44.57kW	16.7kW	128.4kW	208kW

TOTAL CONNECTED LOAD = 263.7 KW
ESTIMATED MAXIMUM DEMAND LOAD = 208 KW



ROAD

1 COMBINED SERVICES SITE PLAN
SCALE: 1/100

ELECTRICAL NOTES:

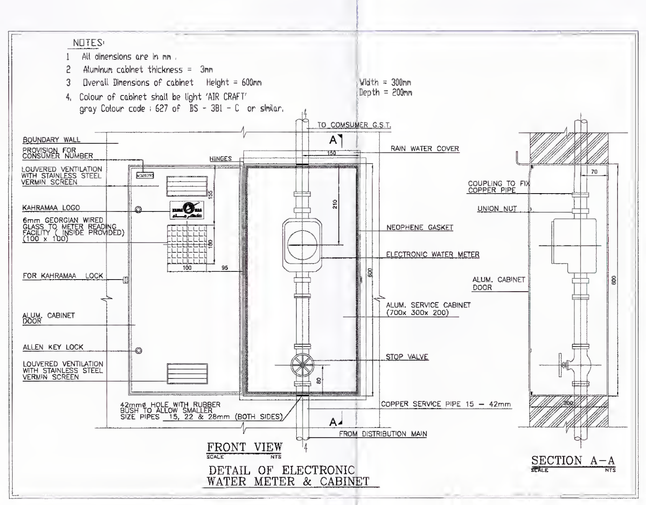
1. ALL ELECTRICAL WORK SHALL BE CARRIED OUT AS PER KAHRAMAA LATEST RULES AND REGULATIONS.
2. ALL ELECTRICAL WORK SHALL BE CARRIED OUT AS PER BRITISH STANDARDS AND CODE OF PRACTICE.
3. THERMAL ROOF INSULATION SHALL BE APPLIED IN THE DEPARTMENT AND MINISTRY OF PUBLIC WORKS. ON THE 27.10.81 THE HEAT TRANSMISSION VALUE FOR THE ROOF SHALL NOT BE GREATER THAN 0.1 BTU/FT2 HR DEGREE F (0.57 WATTS/M2 DEGREE C)
4. ALL EXTERIOR ELECTRICAL FITTINGS SHALL BE WEATHERPROOF.
5. DENOTES COMBINED WCB/ELCB.
6. CONTRACTORR SHALL PROVIDE LOCAL WP ISOLATOR FOR THE EXTERNAL WATER PUMP AND CONDUIT WITH DRAW WIRES FOR H/L & L/L FLOAT SWITCH IN GROUND AND ROOF TANKS.
7. ALL CONDUIT FOR TV SYSTEM SHALL BE MINIMUM 25 MM DIA. PVC CONDUIT.
8. EXACT LOCATION OF SPLIT A/C UNITS TO BE DETERMINED ON SITE, CONTRACTOR TO PROVIDE LOCAL WP ISOLATOR AND PASSAGE SLEEVES FOR OUTDOOR UNITS AND 32MM VIBRATOR PADS.
9. CONDENSATE DRAIN PIPE TO B.S. 2871 TABLE – X.
10. ALL A/C UNITS TO BE INSTALLED AS PER MANUFACTURER RECOMMENDATIONS.
11. CONCRETE PLINT FOR THE OUTDOOR UNITS TO COMPLETE WATERPROOFING BEFORE PLACING THE UNITS ALSO COMPLETE CEILING AND WATERPROOFING TO BE CARRIED OUT AT THE ENTRY OF REFRIGERANT PIPES, ETC....
12. DRAIN PIPES NEAR DOOR SHALL HAVE "U" TRAP REMOVABLE DIRT PLUG.
13. REFRIGERANT GAS LINE PIPE SHALL BE INSTALLED WITH 19MM OIA, THICK RUBBER FOAM WRAPPED WITH GLASS CLOTH AND FOLLOWED WITH TWO COAT OF VAPOUR BARRIER.
14. ALL A/C PIPES PASSING THROUGH WALL/SLABS TO HAVE MINIMUM 75MM DIA. PVC SLEEVES AND COVERED WITH BUILDING MATERIALS.
15. THE PLINT HEIGHT TO BE 100 MM ABOVE FINISHED ROOF LEVEL, HEIGHT & WIDTH DIMENSION TO SUIT THE UNIT.
16. CONTRACTOR TO PROVIDE CONDUITS, WIRES AND FLOAT SWITCH FOR ROOF AND GROUND WATER TANKS.
17. MCCB SHALL HAVE MINIMUM SHORT CIRCUIT BREAKING CAPACITY OF12KA & SHALL BE ADJUSTABLE THERMAL & MAGNETIC TRIPPING.
18. LOCAL WP ISOLATOR FOR ALL EXCERNAL UNITS IF SPLIT A/C TO BE 30A RATING MINIMUM.
19. MINIMUM SIZE OF ELECTRICAL CONDUIT SHALL BE 25 MM DIA. PVC CONDUIT.
20. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ENGINEERS APPROVAL PRIOR TO ANY ELECTRICAL WORK.
21. ALL ELECTRICAL MATERIALS SHALL BE SUBMITTED FOR ENGINEERS APPROVAL PRIOR TO SITE DELIVERY.
22. ALL EXTERNAL LIGHTS TO BE CONNECTED BY BOTH PHOTOCELL AND TIMER SWITCH AS PER KAHRAMAA CIRCULAR REF. DF/DR/DR/1608/74–84.

OOREDOO GENERAL NOTES

1. ALL CIVIL WORKS TO BE EXECUTED BY CUSTOMER/CONTRACTOR UNDER OOREDOO SUPERVISION.
2. CIVIL MATERIALS TO BE PURCHASED FROM OOREDOO WITH SUPERVISION.
3. MDF TO BE PURCHASED FROM OOREDOO AND INSTALLED BY CERTIFIED CONTRACTOR.
4. BLOCK WIRING TO BE EXECUTED BY CERTIFIED OOREDOO CONTRACTOR.
5. CABLE WORKS TO BE LAID BY OOREDOO FREE OF CHARGE UP TO TELECOM ROOM AND ON RECHARGEABLE BASIS FOR LOCAL DP's.
6. CABLE TRAYS WIDTH SHOULD BE BETWEEN 30cm TO 60cm.
7. INTERNAL CONNECTIONS (FOR RESIDENTIAL VILLAS AND APARTMENTS).
   a– VILLAS – ALL INTERNAL WIRING SHALL BE DONE WITH CAT6 CABLE WITH STANDARD PATCH PANEL.
   b– APARTMENTS – ALL INTERNAL WIRING WITHIN THE FLATS SHALL BE DONE WITH CAT6 CABLE AND STANDARD PATCH PANELS.
8. ALL TELECOM JOBS TO BE EXECUTED AS PER OOREDOO STANDARDS AND REGULATIONS.
9. TELECOM ROOM SIZE.....m x.....m.
10. OOREDOO APPROVAL PROVIDED FOR EXTERNAL TELECOM NETWORK ONLY.
11. ALL INTERNAL INFRASTRUCTURE INSIDE THE BUILDING IS UNDER CONSULTANTS/ CONTRACTORS RESPONSIBILITIES.
12. CONSULTANT TO CONTACT QSN DEPARTMENT FOR THEIR REQUIREMENTS.
13. CONTRACTOR SHOULD CONTACT OOREDOO PLANT PROTECTING OFFICER PPO. ON TEL. 44080500/44600700 PRIOR TO EXCAVATION.
14. AN 15 AMP. ELECTRIC SOCKET ADJACENT TO THE MAIN TJB'S (400x400x100) TO BE USED FOR OOREDOO ACTIVE EQUIPMENT, 45cm ABOVE GROUND LEVEL AND 50cm AWAY FROM THE TJB.

OOREDOO LEGENDS

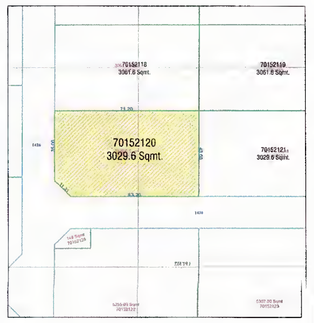
EXISTING		PROPOSED
	UNDERGROUND	
	SURFACE CABLE	
	BURIED CABLE	
■	BLU	◣
⊠	CABINET	◌
○	DP	◌
▣	MANHOLE	◣
▮	JOINTBOX	◣
•	TELEPHONE POLE	○
(	PAYPHONE	



NOTES FOR MAIN LAYING SERVICE PIPE EXTENSION, PROVISION OF STORAGE FACILITIES AND PLUMBING WORK WITHIN CONSUMER'S PREMISES

1. ALL WORKS PERTAINING TO POTABLE WATER SUPPLY WITHIN CONSUMER PREMISES MUST BE CARRIED OUT IN LINE WITH KAHRAMAA PLUMBING BYE–LAWS
2. KAHRAMAA APPROVED MATERIALS SHALL BE USED FOR MAIN LAYING SERVICES PIPE EXTENSION, STORAGE TANKS, PLUMBING AND ASSOCIATED FITTINGS
3. GROUND/ROOF TANKS SHALL BE OF SUITABLE VOLUMES TO PROVIDE ADEQUATE SUPPLY AGAINST LEVEL OF CONSUMPTION
4. ALL PLUMBING WORK SHALL BE HANDED BY KAHRAMAA APPROVED PLUMBING OR PLUMBING CONTRACTORS.
5. THE DISTRIBUTION NETWORKS FOR LARGE COMPLEX COMPRISING OF SEVERAL VILLAS/DWELLING UNITS,SHALL BE LAID IN ACCORDANCE TO KAHRAMAA SPECIFICATION FOR MAINLAYING MATERIALS AND MAINLAYING
Contractors – January 1993 or update
6. ALL WATER METER SHALL BE SECURELY ACCOMODATED INSIDE METER CABINETS.

1 – Services No:.	
2 – Owner Name:.	NASSER KHALIFA A AL–ATYA
3– Plan registration No:.	
4 – Area No.. –	
5 – Street No:.	–
6 – Property certification–No:.	
7– Area:.	3030 Sq. Mt.
8 – Type of building:.	VILLA(GROUND+FIRST)
9 – Municipality:	AL DAAYEN
10 –Daily consumption :	4 + 25 = 29 m³



2 LOCATION PLAN
SCALE: NTS

H.E.'C': 13-762-B
NO OBJECTION TO DEVELOPMENT
Date: 21/6/13

REV	DESCRIPTION	DATE	REV BY	CHKD BY

Revisions

APPROVAL STAMP | OFFICE STAMP

erga QATAR LLC

CLIENT:
NASSER KHALIFA A AL-ATYA

CONSULTANT:
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www.erga.com
Beirut . Paris . Riyadh . Dubai . Manama . Doha

PROJECT TITLE
NASSER KHALIFA A AL-ATYA VILLA

LOCATION
UMM GARN CITY

COMBINED SERVICES SITE PLAN

Drawn BY	RMC	Designed BY	RMC	Checked BY	GIK	DWG. No.
Scale	1:100	DATE	JUNE 2013	Approved BY	DEPT	SSP
Job Number	2120			Rev.	00	